We claim:

1. An adenoviral expression vector for generating immunity against a tumor antigen, said vector comprising a transcription unit encoding a polypeptide, said polypeptide comprising from the amino terminus a secretory signal sequence, a tumor antigen, and CD40 ligand, wherein said tumor antigen is different from CD40 ligand and wherein said CD40 ligand is missing all or substantially all of the transmembrane domain rendering the CD40L secretable.

2. The adenoviral expression vector of claim 1 wherein said tumor antigen is a human tumor antigen.

3. The adenoviral expression vector of claim 2 wherein said tumor antigen is the E7 protein of human papilloma virus.

4. The adenoviral expression vector of claim 1 wherein said transcription unit encodes a linker between said tumor antigen and said CD40 ligand.

5. The adenoviral expression vector of claim 1 wherein said vector includes a human cytomegalovirus promoter/enhancer for controlling transcription of the transcription unit.

6. The adenoviral expression vector of claim 1 wherein said CD40 ligand is human CD40 ligand.

7. The adenoviral expression vector of claim 1 wherein said CD40 ligand lacks a cytoplasmic domain.

8. The adenoviral expression vector of claim 1 wherein the vector encodes a CD40L that includes no more than six residues from either end of the transmembrane domain.

9. The adenoviral expression vector of claim 1 wherein said vector does not encode the transmembrane domain of CD40 ligand.

10. The adenoviral expression vector of claim 6 wherein said CD40 ligand comprises residues 47-261.

11. The adenoviral expression vector of claim 6 wherein said CD40 ligand comprises residues 1-23 and 47-261.

12. The adenoviral expression vector of claim 1 wherein said vector is rendered non-replicating in normal human cells.

13. A method of generating an immune response in an individual against cells expressing a tumor antigen, comprising administering to the individual an effective amount of the adenoviral expression vector of claim 1.

14. The method of claim 13 wherein said tumor antigen is the E7 protein of human papilloma virus.

15. The method of claim 13 wherein said CD40 ligand is human CD40 ligand.

16. The method of claim 13 wherein said cancer cells are cervical cancer cells.

17. The method of claim 16 wherein said tumor antigen is E7 protein of human papilloma virus.

18. The method of claim 13 wherein said administering is repeated.

19. The method of claim 13 wherein said immune response includes the generation of cytotoxic $CD8^+$ T cells against said tumor associated antigen.

20. The method of claim 13 wherein following administration, said vector is taken up by cells which subsequently secrete a fusion protein encoded by the transcription unit.

21. The method of claim 20 wherein said fusion protein forms a homotrimer through interaction of CD40 ligand extracellular domains.

22. A method of treating an individual with cancer that expresses a tumor antigen, comprising administering to the individual an effective amount of the adenoviral expression vector of claim 1.

23. The method of claim 22 wherein said tumor antigen is the E7 protein of human papilloma virus.

24. The method of claim 22 wherein said CD40 ligand is human CD40 ligand.

25. The method of claim 22 wherein said cancer is cervical cancer.

26. The method of claim 25 wherein said tumor antigen is E7 protein of human papilloma virus.

27. The method of claim 22 wherein said administering is repeated.

28. The method of claim 22 wherein said immune response includes the generation of cytotoxic $CD8^+$ T cells against said tumor associated antigen.

29. The method of claim 22 wherein following administration, said vector is taken up by cells which subsequently secrete a fusion protein encoded by the transcription unit.

30. The method of claim 29 wherein said fusion protein forms a homotrimer through interaction of CD40 ligand extracellular domains.

31. A method of generating immunity in a subject to infection by human papilloma virus, comprising administering to the individual an effective amount of the adenoviral expression vector of claim 1 wherein said tumor antigen is the E6 or E7 protein of human papilloma virus.

32. The method of claim 31 wherein said CD40 ligand is human CD40 ligand.

33. The method of claim 31 wherein said administering is repeated.

34. The method of claim 31 wherein said immune response includes the generation of cytotoxic $CD8^+$ T cells against human papilloma virus.